

## REMARKS

Claims 1-3, 13, and 14 are pending in this application.

By this Amendment, claim 1 has been amended to recite that the metallocene compound of formula (I) is in the racemic form, support for which can be found at page 6, line 12. No new matter has been added as a result of this Amendment. Entry and consideration of this amendment by the Examiner earnestly is requested.

### *Claim Rejections*

#### Rejections Under 35 U.S.C. § 103

##### A. Response to rejection of claims 1-3, and 13 under 35 U.S.C. 103(a) as being unpatentable over Bingel et al. in view of Galimberti et al.

In response to the rejection of claims 1-3, and 13 under 35 U.S.C. 103(a) as being unpatentable over International Publication WO 98/40331, equivalent U.S. 6,492,539 relied upon for indexing of Bingel et al. ("Bingel"), in view of U.S. Patent No. 5,565,533 of Galimberti et al. ("Galimberti"), Applicants submit that a *prima facie* case of Obviousness has not been made out by the Examiner, and traverse the rejection.

With respect to the rejection under 103(a), the U.S. Supreme Court in *Graham v. John Deere Co.*, 148 U.S.P.Q. 459 (1966) held that non-obviousness was determined under §103 by (1) determining the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; (3) resolving the level of ordinary skill in the art; and, (4) inquiring as to any objective evidence of non-obviousness. Accordingly, for the Examiner to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. See MPEP §2143. Finally, all claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. (BNA) 580 (C.C.P.A. 1974).

The Examiner has acknowledged that Bingel do not elucidate details to carry out the polymerization. Galimberti do not remedy the deficiencies of Bingel, since the metallocene

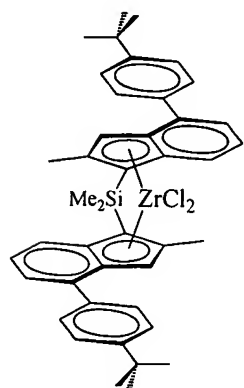
compounds recited in the current claims are not encompassed by Galimberti's metallocene compound formula:



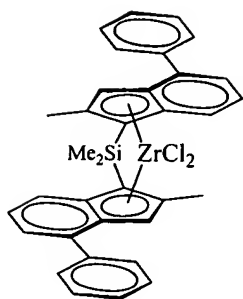
The modifications thus suggested by the Examiner clearly do not represent a situation with a finite, and in the context of the art, small or easily traversed, number of options that would convince an ordinarily skilled artisan of obviousness. *Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc.* Slip Op. 2007-1223, 2008 U.S. App. LEXIS 6786 (Fed. Circ., Mar. 31, 2008) Applicants therefore respectfully submit that for these reasons no *prima facie* case of Obviousness has been made out by the Examiner.

### **Unexpected Results**

However, even if a *prima facie* case of Obviousness has been made out, Applicants' specification provides sufficient evidence of unexpected results with regard to comonomer incorporation to overcome such a case. Table 1 summarizes the comonomer incorporation for dimethylsilylbis(2-methyl-4(4-tertbutyl-phenyl)-1-indenyl)zirconium dichloride (A1)



relative to comparative example 1, dimethylsilylbis(2-methyl-4-phenyl-1-indenyl)zirconium dichloride:



As can be seen in Example 4, relative to Comparative Example 1, and Example 5, relative to Comparative Example 2, the incorporation of 1-hexene is 15.8 vs. 10.3 mol% and 26.5 vs 21.5 mol% respectively, which represents an improvement of from 23 to 53% for the dimethylsilylbis(2-methyl-4(4-tertbutyl-phenyl)-1-indenyl)zirconium dichloride catalyst. Applicants respectively submit that this data represents unexpected results that overcome any *prima facie* case of Obviousness made out by the Examiner. Reconsideration and withdrawal of the rejection respectfully is requested.

B. Response to rejection of claims 1-3, 13, and 14 under 35 U.S.C. 103(a) as being unpatentable over Bingel in view of Resconi et al.

In response to the rejection of claims 1-3, 13 and 14 under 35 U.S.C. 103(a) as being unpatentable over Bingel in view of U.S. Patent No. 5,585,448 of Resconi et al. ("Resconi"), Applicants submit that a *prima facie* case of obviousness has not been made out by the Examiner, and traverse the rejection.

The threshold showing under 35 U.S.C. §103 has been summarized above.

As described in paragraph A above, Bingel does not elucidate details to carry out the recited polymerization. Resconi does not remedy the deficiencies of Bingel. In fact, the current claims recite that the metallocene compound of formula (I) is in the racemic form. In contrast, Resconi's metallocene-based catalysts are in the meso form:

It has now been surprisingly found that it is possible to prepare homo- and copolymers of ethylene having very high molecular weights as well as narrow molecular weight distributions if the polymerization reaction is carried out in the presence of a metallocene-based catalyst wherein the metallocene is stereorigid and it is in its meso isomeric form. (col. 1, lines 58-63, emphasis added)

In this way, Resconi actually teaches away from the present claims, so that a *prima facie* case of Obviousness has not been made out. However, even if a *prima facie* case of Obviousness had been made out, Applicants have made a showing of unexpected results that overcome such a case, as described in paragraph A. Reconsideration and withdrawal of the rejection respectfully is requested.

Applicants respectfully request that a timely Notice of Allowance be issued in this case. Should the Examiner have questions or comments regarding this application or this Amendment, Applicant's attorney would welcome the opportunity to discuss the case with the Examiner.

The Commissioner is hereby authorized to charge U.S. PTO Deposit Account 08-2336 in the amount of any fee required for consideration of this Amendment.

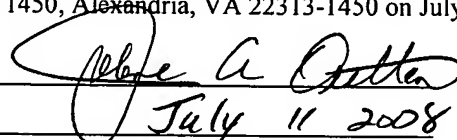
This is intended to be a complete response to the Office Action mailed February 20, 2008.

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with sufficient postage thereon with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on July 11, 2008.

  
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July 11 2008  
Date of Signature

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